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Ruffa

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(54) **ACOUSTIC FUEL SHUTOFF**

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(58) **Field of Search** **141/94, 95, 198, 141/392, 301, 192**

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(57) **ABSTRACT**

A system for preventing overflow from a tank being filled. An open-ended elongated adapted for fixture to a tank extends from an opening of the tank and proximate to a bottom of the tank. A nozzle connectable to a source of pressurized liquid has an open end extension extending through the opening into the elongated tube. The nozzle creates broadband acoustic signals inside of the elongated tube during filling. A microphone mounted on the nozzle near the open end extension senses resonant frequency signals of the acoustic signals and generates representative signals. A module processes the representative signals and generates a closing signal when the representative signals represent a critical resonant frequency. A shut-off valve between the fuel source and the nozzle is responsive to the closing signal.

15 Claims, 1 Drawing Sheet

